WHIRRAKEE

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MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
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Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $40; Family $50; Concession: Single $35; Family $40. *Whirrakee* subscription only is $40.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with members sharing their recent natural history observations. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 5:30pm. Members of the Committee are the Office Bearer listed above and the following members: Anne Bridley, Kerrie Norris, John Lindner, Jenny Shield, Diana Collier, Devi Shanty

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188. To propose bird observing excursions please contact Kerrie Norris 5447 8017.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 35, No. 6, July 2014
Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*), which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions should be posted or e-mailed to the editor at least two days prior to the last Wednesday of the month. They will be included as soon as possible after they are received, although space restrictions occasionally require shortening of articles or holding them over till the following edition of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
It is always nice to have passed the shortest day in the year. That way, you can feel optimistic amongst the freezing dark mornings and early dusk each day, the howling winds and cold rain. It feels even better, when I remind myself that our plants are thriving during this time and that for many birds and other animals, this is the time to fatten up and get ready for family life. Many ironbarks in Bendigo are flowering madly and are covered in birdlife from pre-dawn to after dusk. We are so lucky.
Time has flown again, and in a couple of months is our AGM. Nominations for office bearers will open in August, but nominations will be considered right up to the AGM. Please give some considerations to playing a more active part in the club, if you are not doing so at present. If you are willing to become involved, but not sure in what capacity, please contact any one from the committee between now and September.

Front page photographer: Simon Smith
This Powerful Owl was spotted at Crusoe Reservoir on the recent long weekend. When showing the park ranger later in the day, he became pretty excited! Apparently it's the 150th bird species recorded at the Reservoir. The ranger is hoping they will breed there. This Owl has a partly-eaten Ringtail Possum at its feet.

Short Notices

BFNC Garden Working-bee
Sunday July 20th 1-3pm

The BFNC garden surrounding the Golden Square Hall has been a fantastic part of the club's recent history and it certainly makes the Hall a much more appealing place to meet. However, without careful maintenance the garden will become overgrown, weedy and unsightly. Following our last clean-up, it's now time to rejuvenate the garden with some new plantings. All members are invited to join our planting day on Sunday July 20th 1-3pm. Bring your gloves and hand tools for planting. Toilets and cuppa facilities are available in the Hall.

But before that…

Gazania weeding
Sunday 13th July 1-4pm

BFNC Members are also invited to join a Gazania weeding afternoon at the Huntly Pound Paddock (Cnr Greene St and Gungurroo St). The BFNC are the committee of management for this reserve and after an assessment of the site last year, it was found that Gazanias are beginning to spread into the reserve from the adjacent roadside. The Gazania weeding afternoon will focus on removing seedlings within the reserve and assess methods for removing the roadside population in the future. Bring gloves and a hand tool suitable for weeding (no knifes please). Don't forget a snack and you'll probably want something warm to drink. No toilets available.

Sunday 6th July - *How ants run ecosystems in Australia and around the world*
by Alex Wild at Newstead Community Centre, 3:30pm.
Mid-winter doesn't seem to be the best time to watch ants or other insects. Many species will be passing the season as eggs or unseen juvenile forms and others like the Meat Ants in the photo below will most likely be underground with their nest entrances closed off. But there will be plenty of insect life to be seen when American photographer and entomologist Alex Wild visits Newstead Landcare to give this presentation

Meat Ants, Iridomyrmex purpureus, *at Yandoit, copyright* www.alexanderwild.com

Alex is a research scientist specialising in insects, especially ants, but also beetles, bees, wasps, and various other arthropods. He is also widely known as an insect photographer and teacher of macro photography. Alex says: 'Since ants have their muddy little tarsi in everything, (preying on things, dispersing seeds, aerating soils, scavenging, all sorts of mutualisms & mimicry), the talk will cover a lot of other taxa too.
Presented by Newstead Landcare in conjunction with the Norman Wettenhall Foundation and Connecting Country. If you are interested in ants, insect photography or a good natural history tale, mark this date in your calendar. Meanwhile, you can see more of Alex's work at www.alexanderwild.com.

August BFNC excursion
An advance notice for the August excursion is on page 10. Please check all the details there.

The advance notice for the spring **SEANA camp** is on the back cover.

Do you know what day is marked on July 27?

For more short notices, see page 9 and the diary page…

The bush is wet and very green….**Fungi weather**!
The fungi grew in Jenny Shield's backyard at the end of May.

The orange fungus, growing on the Melaleuca wood chips is *Hypholoma aurantiacum* and the one with the grey cap is *Coprinus atramentarius*, inky cap. Photographer: Jenny Shield; identified by Joy Clusker.

The *Peziza thozetii* (below left) was photographed at Strathfieldsaye, while the *Cotinarius sinapicolor* (below right) was growing at Sweeneys Creek

Photographer:
Joy Clusker

Preview of the July Family Nature club destination - Goldfields Track Bush Walk: Sunday, 20th July 2014. Photos taken by Joy Clusker on a 'rekkie' in May

We are very lucky to have such beautiful country so close to town. From what I understand, this area is near Sedgwick and the views are towards One Tree Hill and Mt Ida (but I stand corrected if I got this wrong, ed.). If you are keen to go on this walk (you are especially welcome to join as a helper/ crowd controller), see the Family Nature Club advertisement for an address to register your interest.

Top: This Powerful Owl has already featured on the front page, but I wanted to show it here again - in colour (Photo by Simon Smith)

Left: A couple of Brolgas, also photographed in early June, at a feedlot beside the Bendigo-Tennyson Road, north of Kamarooka (Photo by Simon Smith)

Right: Inspiring shapes and colours of the bush at Mandurang (Photographer Karen Thomas)
It is fascinating to think how evolution brought forth these ants to make their nest entrance like that!

One Tree Hill sightings 8 June 1014
by Dale Little
Left: red-bellied black snake basking on the rocky bank.

Below: A piece of sandstone with some interesting markings on it. Who or what might have done this?

Right: tall greenhood orchid *Pterostylis melagamma*, formerly *P longifolia*).

Below: More inspiring shapes and colours from Mandurang. The photographer, Karen Thomas, says: Who needs Art Galleries!

One Tree Hill sightings 8 June 1014

by Dale Little (for photos see page 7)

Our afternoon walk on One Tree Hill was most eventful. We were delighted to discover two areas where there were numerous specimens, most in bud, of the tall greenhood orchid (*Pterostylis melagamma*, formerly *P. longifolia*). We also saw three flowering specimens of Autumn Greenhoods (*P. revoluta*) - a single flower on a leafed stem with no basal leaf. There were also several large patches of very healthy looking basal rosettes along the pathways.

On our downward path we startled five wallabies all looking plump and well fed, (obviously a good season for them). Four moved quickly into the scrub as we approached, while one seemed to consider whether we were a threat or not before moving off.

Most exciting was our sighting of a red-bellied black snake basking on the rocky bank. It was about a metre in length and quickly slithered back into its hole when Peter pushed aside a dead bush in order to get a clearer view of it.

There were numerous small birds flitting amongst the trees - mostly thornbills (not sure which ones) and a scarlet robin of which we had a good sighting as it went from a low branch to the ground and back again.

Our final observation was a small piece of sandstone on which there were very interesting markings – circular areas with curved lines radiating from them.

New 'App' about fungi

via Joy Clusker

For those keen on new 'Apps' and the amazing things they can do, there is a new App for I-phones on Australian Fungi called iFungi AU. It is the first Australian Fungi app and shows the edibility of Fungi as well as identification and a Quiz also.

Book Review

by John Lindner

The fact of evolution
Cameron Smith,
Prometheus Books,
New York 2010
Bendigo Library 576.8 SMI

Explaining evolution is a bit like explaining climate change. To some degree, it's all in the meanings of the words used – put a foot wrong and some people will come down on you like a ton of bricks. However the issue is that in both cases we are looking at phenomena which do exist in the real world, and which scientific method can explain very well.

As field naturalists examining living things, especially plants, we are frequently looking at the results of evolutionary forces, which have produced very good adaptations to fit the environment of Central Victoria. Here are a couple of examples. Leaves of Alpine Grevillea (*Grevillea alpina*) are folded lengthwise with quite a deep depression and are very finely hairy. These features combine to protect the stomata on the inner surface from direct sunlight and heat, and also slow the speed of the wind over the surface, thereby reducing water loss. Leaves of all our local eucalypts to some degree hang in a vertical position to reduce sun exposure, and also have very rigid, fibrous structures able to withstand moisture reduction without collapsing. Animal organisms, which live in this part of the world, also have a huge range of adaptations.

However, if many of us were asked to explain evolution, we would probably find ourselves stumbling. This is despite the fact that evolution is pretty much an accepted dogma these days, even though it is often labelled as a 'theory'. But it is an incredibly subtle and multi-layered concept, difficult to isolate the essentials. Charles Darwin laid out the basic concepts in the nineteenth century, but it was

not until the discovery of chromosomes and genes that the nuts could be firmly screwed onto the bolts.

I did re-read this book in order to compile this review. It is less a critical review and more an encouragement for you to read it. On my first reading a few years ago, it really struck me as a model of clarity for a complex subject. If you find yourself struggling with some aspects of evolution, this is the book for you. Here is why:

•It takes things in nice, easy little steps. While there are 9 main chapters, these are broken up into no less than 102 smaller sections, all with nice big headings, so you don't get too tired with all the detail. I do like my complex explanations broken into small bites. Smith is quite anxious to make sure you understand one level before you move to the next.

•It is clearly based on three starting facts about the natural world: life-forms have offspring (replication); offspring are not identical (variation): some offspring pass more of their genes on to the next generation than others (selection). These three key aspects lead inexorably to the development of species of which we see such a huge diversity.

•The author makes frequent use of tables, which set out in summary form what he has described (eg. 'Levels of biological organization', 'Sources of variation', 'Constraints on variation'). Again these are a great help in a complex area.

•There are many useful diagrams to further clarify concepts (eg.'From DNA to cell generation', which summarises the process from the unwinding of chromosomes to the creation of new cells). The DNA determines the genotype, the instructions for replication, and the organism that is created is the phenotype.

•Smith also marshals the research work of various scientists in this field by quoting some of their views and findings.

Smith does not spend too much time debunking the 'delusions' of Creationism or Intelligent Design. His book is not primarily intended as a rebuttal of other approaches, but he does point out that religion and science are looking at things from different points of view. Finally, he attempts to explain why humans are peculiarly biased towards explanations, which include purposeful design: it is part of our make-up as inventers and makers of things ourselves…

…food for thought!

Mosses of the Dry Forests', a new book by Bernard Slattery and Cassia Read was launched recently. E-mail Matt Comer or Sabine Wilkens for an order form (Cost $10.-)

17th Box-Ironbark Ecology Course
Monday – Friday, 6th-10th October
Nagambie Lakes

Five absorbing days of field studies in the heart of Box-Ironbark country hosted by the Euroa Arboretum for those interested in gaining a general understanding of ecological processes and principles.
Instructors will be Cathy Botta (soil scientist and educator), Andrea Canzano (entomologist), Garry Cheers (experienced naturalist), Paul Foreman (botanist and forester), Lindy Lumsden (wildlife biologis), David Meagher (environmental scientist), Kate Stothers (educator interested in private land conservation) and Lance Williams (ecologist with 30 years experience in fauna survey, assessment and management).

The five day residential course is based at Nagambie Lakes Leisure Resort with en suite facilities. Catering is inclusive of all meals.
Course Fee: $1600 (plus GST) includes accommodation, meals, transport, instruction, and course notes. For more information: Kate Stothers katelance1@gmail.com or phone 0458 680 990

National Tree Day, Sunday 27 July 2014 and Schools Tree Day on 25 July.
To get involved, see
http://treeday.planetark.org/coords/2miltreesvic.cfm

Bendigo Field Naturalists Club – Proposed Excursions for the remainder of 2014

Friday 15 August Excursion (advance notice)

Subject **Waterbird observations and count**
Leader Jane Cleary
Location Coliban Water sewerage treatment works, Epsom
Duration Half day
Notification Please let Jane know at the July or August general meetings, that you will be coming
Meeting Place/Time 9.00 am at the sewerage treatment plant, Howard Street, Epsom. From the main entrance, proceed to the end of the road to the visitor parking area
Induction Coliban Water now requires that all participants must undergo a short induction session before being admitted to the ponds. This is the main reason why, at the moment, we cannot run the activity on a weekend. 5 people did this session on 28/2/14. We will have to book new people in for this session. Once you have done it, you don't have to do it again

Please bring Binoculars and telescope if you have one. Warm clothes and raingear, since the site is a bit exposed to the wind. Morning tea refreshments.

Background A small group of people have been doing these counts twice a year for some time. We have been lucky enough to have seen some wonderful things: many busy little Blue-billed Ducks, the strange behavior of the male Musk Duck and even some interesting antics by Buff-banded Landrails. But all the waterbirds are interesting and beautiful in their own ways. And we do actually look at all the bush birds and birds of prey as well. So there is plenty to see.

Walking distance We usually start off by observing a little swamp in the bend of Wallenjoe Road, called Crake's Dam: if the water level is low, you can sometimes get a good look at Spotted Crakes. The full walk encompasses one side of Lagoon 6 with the 2 islands and around May Swamp, returning to the cars via Wallenjoe Road. Total distance = 3.5 km, but it's done quite slowly with a lot of stops.

Sunday 14 September
Theme **Botany (Spring wildflowers) and birds**
Possible locations Wildflower Drive, Strathfieldsaye, Sedgwick Water Channel and adjoining Big Hill Range, One Tree Hill, Whipstick-Kamarooka (SEANA 2012 format, SF), Wellsford Forest (SF), South-eastern forests (SF), Southern Whipstick (SF)
Duration Whole day Leader(s) To be appointed

Sunday 12 October
Theme **Botany (Spring wildflowers) and birds**
Location One of the excursions listed under September
Duration Whole day Leader(s) To be appointed

Weekend 1/2 November with Monday 3 and Tuesday 4 (Melbourne Cup Day)
Theme **Campout**
Location Warby-Ovens National Park, Killawarra Forest (northern) section
Camping at The Forest Camp (toilets, shelter, fireplaces, camping spots)
Could also visit Warby Range (southern) section and Honeyeater Dam, Chiltern-Mount Pilot National Park
Duration See dates above Leader(s) To be appointed

Diary

All Club meetings are held at the Golden Square Senior Citizens Building, Old High St Golden Square, unless otherwise indicated.

Wednesday July 9 **7.30pm**
The July speaker is Dr Stephen Legg, School of Geography & Environmental Science, Deakin University. The topic: *Timber and Gold: Conserving Victoria's Forests, 1865-1918*

Excursions for August – Advance Notice
Friday 15 August
Waterbird count at Coliban Water sewerage treatment works, Epsom (for details about this excursion and future excursions, see page 10)

Family Nature Club
The Nature Club will conduct a walk along the Goldfields track on July 20. Have a look out the beautiful photos taken by Joy Clusker on page 5 when researching the destination, or look at their website. **Registration:** Bendigonatureclub@gmail.com or 5443-1326
http://bendigofamilynatureclub.blogspot.com/

Bendigo Native Plant Group meeting.
All interested people are welcome to come along. Meeting starts at 7:30pm on the third Tuesday of the month, Golden Square Senior Citizens Hall. Next meeting: 15th of July

Advance notice: 10th Biennial FJC Rogers Seminar – *Brachychiton* and Allied Genera Saturday and Sunday 18th and 19th October

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.
WRIN meetings held on the 1st Saturday of the month at 1pm the Golden Square Senior Citizens Hall

Sunday 6th July - Ants talk by Alex Wild at Newstead Community Centre, 3:30pm. See page 3 for details.

Photo and Art Show
Naturalists, photographers and artists! You are invited to join in a show at a friendly Geelong gallery. "Birds"- *The Heather Gibbs Memorial Art Prize* is open to amateur and professional artists and photographers; all comers welcome.
Your work will be exhibited in October, with prizes awarded for photography, painting, works on paper and the $500 Heather Gibbs Prize for excellence. Entry forms and details are available from: Jan Synot 0421969230
http://www.artisgeelong.com

SEANA spring camp 2014 Portland Field Naturalists Club.
Portland Field Naturalists Club members are pleased to invite fellow naturalists to the SEANA Spring campout to be held in Portland on the **26th – 29th September 2014.**
Program Highlights include;
Botany, Magnificent coastal scenery, Aboriginal heritage, Bird watching, Glenelg River cruise, Seals tour, Harbour Cruise, Rockpooling, Enchanted forest walk, Cape Nelson-Point Danger seabird watching and nature walk.
They have a particular emphasis on catering for children, with the camp occurring in the school holidays, and have scheduled Junior activities and reduced child rates.
Full Payment must be received by August 31st, 2014
Camp coordinator: Ruth Graney, Phone: 55295335, Email: irgraney@bigpond.com

Matt will have the full information at the July and August general meetings for viewing.

17th Annual Hindmarsh Landcare Tree Planting, Saturday & Sunday 16 & 17August Rainbow. Detail and how to register will be posted on the website below soon, or contact Steve Hemphill on 0429 006 936
http://www.hindmarshlandcare.org.au/